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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

GÖTTL, M. et al.

Atty. Ref.: 265-106

Serial No. 10/049,809

Group:

Filed: February 19, 2002

Examiner:

For: HIGH-FREQUENCY PHASE SHIFTER UNIT

\* \* \* \* \*

May 15, 2002

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

SUBMISSION

Submitted herewith is an English language translation of the International Preliminary Examination Report of the parent PCT/EP00/07236 application.

An early and favorable Action on the merits is requested.

Respectfully submitted,

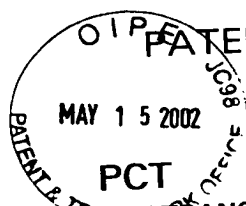
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# PATENT COOPERATION TREATY

## PCT

### NOTIFICATION OF TRANSMITTAL OF COPIES OF TRANSLATION OF THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 72.2)

**Copy**

From the INTERNATIONAL BUREAU

To:

**Patentanwältin  
FLACH & BAUER**
**15. April 2002**  
 FLACH, Dieter  
 Adlzreiterstrasse 11  
 83022 Rosenheim  
 ALLEMAGNE

Date of mailing (day/month/year) 03 April 2002 (03.04.02)	<b>IMPORTANT NOTIFICATION</b>
Applicant's or agent's file reference 345 P 247 PCT	
International application No. PCT/EP00/07236	
Applicant KATHREIN-WERKE KG et al	

**1. Transmittal of the translation to the applicant.**

The International Bureau transmits herewith a copy of the English translation made by the International Bureau of the international preliminary examination report established by the International Preliminary Examining Authority.

**2. Transmittal of the copy of the translation to the elected Offices.**

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following elected Offices requiring such translation:

CA,CN,JP,KP,KR,US

The following elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

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**3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).**

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report.

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. (41-22) 740.14.35	Authorized officer  Odile ALIU  Telephone No. (41-22) 338.83.38
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Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 345 P 247 PCT	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP00/07236	International filing date (day/month/year) 27 July 2000 (27.07.00)	Priority date (day/month/year) 17 August 1999 (17.08.99)
International Patent Classification (IPC) or national classification and IPC H01P 1/18		
Applicant KATHREIN-WERKE KG		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 17 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 22 February 2001 (22.02.01)	Date of completion of this report 13 August 2001 (13.08.2001)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP00/07236

## I. Basis of the report

### 1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed
- ☒ the description:  
 pages 1-3,5,7,10,11, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages 4,6,8,9,12,13, filed with the letter of 25 July 2001 (25.07.2001)
- ☒ the claims:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement under Article 19  
 pages \_\_\_\_\_, filed with the demand  
 pages 1-23, filed with the letter of 25 July 2001 (25.07.2001)
- ☒ the drawings:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages 1/6-6/6, filed with the letter of 25 July 2001 (25.07.2001)
- ☐ the sequence listing part of the description:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

### 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

### 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

### 4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

### 5. ☒ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP00/07236

## III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 4.21

because:

☐ the said international application, or the said claims Nos. \_\_\_\_\_  
relate to the following subject matter which does not require an international preliminary examination (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 4.21  
are so unclear that no meaningful opinion could be formed (*specify*):

See supplemental sheet

☐ the claims, or said claims Nos. \_\_\_\_\_ are so inadequately supported  
by the description that no meaningful opinion could be formed.

☐ no international search report has been established for said claims Nos. \_\_\_\_\_

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

**I. Basis of the report**

1. This report has been drawn on the basis of *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.)*:

Some amendments submitted with the letter of 25.07.2001 introduce substantive matter which, contrary to PCT Article 34(2)(b), goes beyond the disclosure in the international application as filed. The present report has therefore been established without taking the following amendments into account:

- page 6, lines 14-18: 'which also includes straight and mutually parallel stripline sections (viz. in case the radius of the arcuate stripline sections becomes infinite)'. The original application does not mention that parallel straight lines represent a borderline case of concentric sections.
- page 13, lines 6-12: The original application does not disclose an amended embodiment according to Figure 5 such that 'the straight stripline sections are arranged on the same side and are scanned by a single pointer-shaped pick-off element'.

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: III

Claims 4 and 21 are so unclear that for these claims it was not possible to establish a report on novelty, inventive step and industrial applicability.

Claims 4 and 21 contain features which are incompatible with the subject of Claim 1.

- According to Claim 1 'the respective connecting line to a next stripline section situated further out is formed by extending a connecting line situated further in'. However, Claim 4 describes how 'the individual connecting lines each begin in an isolated arrangement at the central pick-off and run to the respective pick-off section'. Since, however, lines cannot simultaneously be an extension of another line and isolated from one another, Claim 4 is inconsistent with Claim 1.
- 'Concentric' (Claim 1) means, according to Duden, '(in circles, spheres) having a common centre'. Only circles or circular arcs and spheres or spherical segments can be arranged concentrically. A concentric arrangement of straight sections as stated in Claim 21, however, is not possible. A person skilled in the art would moreover not regard this as a borderline case of concentric (arcs of) circles for a radius approaching infinity, since a concentric arrangement of straight lines is mathematical nonsense (the converse conclusion would be that every straight line is also circular).

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 00/07236

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims	1-3, 5-20, 22, 23	YES
	Claims		NO
Inventive step (IS)	Claims	1-3, 5-20, 22, 23	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-3, 5-20, 22, 23	YES
	Claims		NO

**2. Citations and explanations**

The following document is cited:

D1: PATENT ABSTRACTS OF JAPAN, vol. 1998, no. 1,  
30 January 1998 (1998-01-30) &  
JP-A-09 246 846 (NTT IDO TSUSHINMO KK),  
19 September 1997 (1997-09-19).

1. The invention relates to a phase shifter unit with concentrically arranged stripline sections and a pick-off element arrangement in the manner of a pointer element turning on a swivel axis.

A phase shifter of this type is shown in D1, the closest prior art (PATENT ABSTRACTS OF JAPAN, vol. 1998, no. 1, 30 January 1998 (1998-01-30) & JP-A-09 246 846 (NTT IDO TSUSHINMO KK), 19 September 1997 (1997-09-19)).

The subject of Claim 1 differs from D1 in that a connecting line to a stripline section situated further out is formed by extending a connecting line situated further in, which leads to an stripline section situated further in. This feature is neither



disclosed in nor rendered obvious by the available prior art. Claim 1 therefore meets the requirements of PCT Article 33 in respect of novelty, inventive step and industrial applicability.

2. Claims 2, 3, 5-20, 22 and 23 relate to advantageous developments of the subject of Claim 1 and therefore likewise meet the requirements of PCT Article 33.

## VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

1. In Claim 1 it is not clear whether 'pair of antenna radiators' denotes a dipole radiator (e.g. 1a) or two radiators (e.g. 1a and 1d).

In Claim 1, line 24, it is not clear how the pick-off element can at the same time be both (rigidly) connected to the associated stripline section and swivel across it.

Claim 3 is appended to itself, rendering the claim unclear.

Claim 4 refers to 'connections' and the 'central pick-off or central coupling section', although the previous claims contain no corresponding antecedents.

In Claim 13 it is not clear what 'these' refers to. 'These' evidently refers to a plural noun ('are screened'), whereas 'phase shifter unit' is singular.

2. For the reasons given in Box III and also for lack of the feature 'the pick-off element situated further in', the embodiment described on page 13 and illustrated in Figure 5 does not fall within present Claim 1. This inconsistency between the claims and the description leads to doubts as to the subject matter for which protection is sought, so that the claims are not clear (PCT Article 6). Consequently

## VIII. Certain observations on the international application

the reference on page 5, line 2, to 'an embodiment' is also not correct.

3. The reference signs 31c, 31d, 21d and 27d used in Claims 1, 2, 4 to 10, 14 and 15 do not appear in the drawings.